

Title (en)

LED-BASED LIGHT

Title (de)

LED-BELEUCHTUNGSEINRICHTUNG

Title (fr)

DISPOSITIF D'ÉCLAIRAGE À DIODES ÉLECTROLUMINESCENTES

Publication

**EP 2691799 B1 20200819 (DE)**

Application

**EP 12703996 A 20120130**

Priority

- DE 102011015161 A 20110326
- DE 102011084062 A 20111006
- EP 2012051418 W 20120130

Abstract (en)

[origin: WO2012130497A1] The invention relates to LED lighting devices comprising two optical waveguides (1) which are separated from each other, which are separated by an intermediate region of length A and into which the radiation from at least one LED (3) is coupled into the optical waveguide (1) through the end faces (2) and is guided in the optical waveguides (1). The outer circumferential surface regions of the optical waveguides (1) have means for coupling out (4) radiation (5), which reflect the radiation into the waveguides (1) and couple said radiation passing through the optical waveguides (1) out of the optical waveguides (1). The distance A is chosen such that the brightness difference  $\Delta I$  measured in the center of the intermediate region at a distance of 10 mm is at most 25%, based on the maximum value of the brightness. As a result, a highly homogenous lighting profile can be achieved. The LED lighting device (1) can be expanded modularly, is resistant to vibrations and can be used for lighting vehicle interiors, in particular aircraft interiors, but also for the position lighting of vehicles.

IPC 8 full level

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CPC (source: EP US)

**B60Q 3/43** (2017.01 - EP US); **B60Q 3/64** (2017.01 - EP US); **F21S 2/00** (2013.01 - EP US); **F21S 41/176** (2017.12 - EP); **F21S 41/24** (2017.12 - EP US); **F21S 43/13** (2017.12 - EP US); **F21S 43/237** (2017.12 - EP US); **F21S 43/245** (2017.12 - EP US); **G02B 5/04** (2013.01 - US); **G02B 6/001** (2013.01 - EP US); **G02B 6/02** (2013.01 - US); **B60Q 3/62** (2017.01 - EP US); **B64D 11/00** (2013.01 - US); **F21W 2106/00** (2017.12 - EP US); **F21W 2107/30** (2017.12 - EP US); **F21W 2121/00** (2013.01 - EP US); **F21Y 2115/10** (2016.07 - EP US); **G02B 6/0038** (2013.01 - EP US); **G02B 6/0068** (2013.01 - EP US); **G02B 6/0073** (2013.01 - EP US); **G02B 6/008** (2013.01 - EP US)

Citation (examination)

WO 2009134572 A1 20091105 - 3M INNOVATIVE PROPERTIES CO [US], et al

Cited by

US11867630B1; US12079980B2

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